BEFORE THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION OF THE STATE OF MONTANA

* * * * * * *

APPLICATION TO TEMPORARILY CHANGE WATER RIGHT NO. 76G 30145973 BY CLARK FORK COALITION	**PRELIMINARY DETERMINATION TO GRANT TEMPORARY CHANGE IN MODIFIED FORM**

* * * * * * *

On November 20, 2020, the Clark Fork Coalition (Applicant) submitted Application to Change Water Right No. 76G 30145973 to temporarily change Water Right Claim 76G 30103774 to the Missoula Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). On January 28, 2022, the final processing of this application was transferred to the Central Office of the DNRC Water Rights Bureau in Helena. A pre-application meeting was held between the Department and the Applicant on April 16, 2020. The Department published receipt of the Application on its website. The Department sent Applicant a deficiency letter under § 85-2-302, Montana Code Annotated (MCA), dated May 6, 2021. The Applicant responded with information dated August 23, 2021. The Application was determined to be correct and complete as of September 30, 2022. An Environmental Assessment for this Application was completed on January 6, 2022**.**

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Application to Change an Existing Irrigation Water Right, Form 606-IR
- Change to Instream Flow Addendum (Form 606-IFA)
- Change of Purpose Addendum (Form 606-PA)
- Temporary Change Addendum (Form 606-TCA)
- Historical Water Use Addendum (Form 606-HUA)
- Maps
    - NAIP aerial photo dated August 2, 1966, showing historical place of use
    - NAIP aerial photo dated August 2, 1966, showing historic operation
    - NAIP aerial photo dated August 2, 1966, showing proposed use
    - 1966 Natural Resource Conservation Service (NRCS) aerial photo showing Dry Cottonwood Creek Ranch historic irrigation
    - 2011 NRCS aerial photo showing Dry Cottonwood Creek Ranch continued irrigation

- Water Table Elevation and Groundwater Flow Direction map, dated March 3, 2010

- Measurement Records via Dry Cottonwood Creek Ranch Water Measurement Summary (2010, Lower Dry Cottonwood Ditch)
- Table showing proposed changes to Claim 76G 30103774
- NRCS SNOTEL Snow Water Equivalent Reports and Data (2010 Comparison to Pre-1973 conditions)
  - Peterson Meadows (930) SNOTEL data 1966 – 2019
  - NRCS Montana News Release: *February 1 Mountain Snowpack Remains Above Average* (No Date)
- Modern (No Date) Photos of the Lower Dry Cottonwood Ditch Headgate, Lower Dry Cottonwood Ditch, and flood irrigation of historic place of use
- Historic use volume calculation via 2010 Dry Cottonwood Creek Ranch water measurement summary (Lower Dry Cottonwood Ditch)
- Crop Records
  - 2010 Hay ledger for Dry Cottonwood Creek Ranch
  - 2013 Hay ledger, Helen Johnson/Dry Cottonwood Ditches
- Historic Use Affidavits from John Thomas (signed November 22, 2013) and Hans Lampert (signed November 12, 2013)
- Manning's Equation Ditch Capacity Calculation
- Sprinkler System Designs for continued irrigation under Temporary Change Authorization 76G No. 30069069
  - Map titled DCCR Helen Johnson and Dry Cottonwood Ditches irrigated acres after project
  - Irrigation requirements for the Dry Cottonwood Creek Ranch
  - Diagram of Clark Fork Coalition Pump Site: Front View
- Montana Department of Fish, Wildlife, & Parks (FWP) Support Letter for Instream Flow in Dry Cottonwood Creek, dated March 4, 2014

<u>Information Received after Application Filed</u>

- Response to Department Deficiency Letter from Applicant, received August 23, 2021

<u>Information within the Department's Possession/Knowledge</u>

- Water Right Files for Claim 76G 30103774
- DNRC Irrigation Change Application Technical Report, dated September 30, 2022
- File for Temporary Change Authorization No. 76G 30069060
- Surface water rights information for the Clark Fork River

- Data from USGS Stream Gage No. 12323800 Clark Fork near Galen, MT
- Memo from Troy Lechman, DNRC Surface Water Hydrologist, *re: SNOTEL data and 2010 crop production records submitted in application materials*, dated April 27, 2022
- 1955 Deer Lodge County Water Resources Survey, maps, and field notes
- Montana Cadastral parcel and property information

The Department also routinely considers the following information. The following information is not included in the administrative file for this Application but is available upon request. Please contact the Water Rights Bureau/ Central Office at 406-444-9556 to request copies of the following documents.

- DNRC Return Flow Memo, dated April 1, 2016
- DNRC Consumptive Use and Irrecoverable Loss Memo, dated April 15, 2013
- DNRC Historic Diverted Volume Standard Methods Memo, dated September 13, 2012
- DNRC Consumptive Use Methodology Memo, dated March 17, 2010

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, part 4, MCA).

WATER RIGHT TO BE CHANGED

FINDINGS OF FACT

1. Statement of Claim 76G 30103774 is proposed to be changed in this application. This water right was split from Parent Claim 76G 40507-00 on November 17, 2015 and severed from the historic place of use on April 3, 2020, to create the version listed in Table 1. The other child right to this parent claim, Claim 76G 30103775, was dismissed on November 17, 2015 by the Montana Water Court. The water right being changed claims a maximum flood irrigated acreage of 432 acres. Claim 76G 30103774 lists two points of diversion from Dry Cottonwood Creek, tributary to the Clark Fork River in Deer Lodge County. The first point of diversion consists of the Lower Dry Cottonwood Ditch headgate in the SENWSW of Section 28, Township (T) 6 North (N), Range (R) 9 West (W), while the second point of diversion consists of an upstream headgate located in the SWSESE of Section 28, T6N 9RW in Deer Lodge County. The parent right for Claim 76G 30103774 was not included in the Preliminary Decree issued for Basin 76G issued May 17, 1985. The historically claimed elements of the water right proposed for change are listed below:

Table 1. Claimed elements of Claim 76G 30103774:

WR Number	Purpose	Flow Rate	Period of Use	Points of Diversion	Place of Use	Priority Date	Claimed Acres

76G 30103774	Irrigation	4.28 CFS	3/4 -11/4	SENWSW, SWSESE S. 28, T6N 9RW	E2 S. 20, W2 S. 21, NWNWNW S. 28, E2 S. 29, T6N R9W	2/12/1883	432

2. The water right being changed in this application is located in the Upper Clark Fork River Basin (Basin 76G), which is subject to a legislative water right basin closure.

3. Claim 76G 30103774 was historically fully supplemental to Claim 76G 30103776 (Dry Cottonwood Creek), and Claims 76G 30103778 and 76G 30103784 (Clark Fork River) (Table 2). The supplemental Clark Fork River claims are currently owned by the Applicant, while the supplemental Dry Cottonwood Creek claim was sold by the Applicant to Stefanie A. and Tracy L. Forcella along with the historical ranch. The supplemental Clark Fork River claims are currently used instream and to irrigate 80.67 acres in the historical place of use under Temporary Change Authorization (Temporary Authorization) 76G 30069060. Claims 76G 30103780, 76G 30103781, 76G 30103782 also have supplemental places of use that overlap with the place of use listed on Claim 76G 30103774. However, according to the Applicant and as found in the Preliminary Determination (PD) to Grant Temporary Change Application (Application) 76G 30069060, these claims were historically diverted into the Alvi-Beck Ditch to irrigate only a separate 195-acre place of use that does not overlap with the place of use historically irrigated with the water right being changed. These three claims (76G 30103780, 76G 30103781, 76G 30103782) will not be considered as supplemental water rights in the historic use assessment of Claim 76G 30103774.

Table 2. Supplemental Water Rights to Claim 76G 30103774

WR Number (Purpose)	Flow Rate	Period of Use	Point of diversion	Irrigation Place of use	Instream Place of Use	Priority date	Acres
76G 30103776 (Irrigation)	5.49 CFS	3/1 –11/4	Dry Cottonwood Creek Ditch, SENWSW, SWSESE S. 28, T6N R9W	E2 S. 20, W2 S. 21, NWNWNW S. 28, E2 S. 29, T6N R9W	--	6/4/1902	432
76G 30103778 (Irrigation, Instream Flow)	1.9 CFS (Irrigation), 5.98 CFS (Instream Flow)	4/1 – 11/19 (Irrigation); 6/15-9/6 (Instream Flow)	NENWSE S. 29, T6N R9W	E2 S. 29, T6N R9W	Clark Fork River from POD (Helen Johnson Headgate) to SENENE S. 7, T5N R9W	7/10/1920	80.47
76G 30103784 (Irrigation, Instream Flow)	0.65 CFS (Irrigation), 3.3 CFS (Instream Flow)	4/1 – 11/4 (Irrigation); 6/15-9/6 (Instream Flow)				12/31/1875	80.47

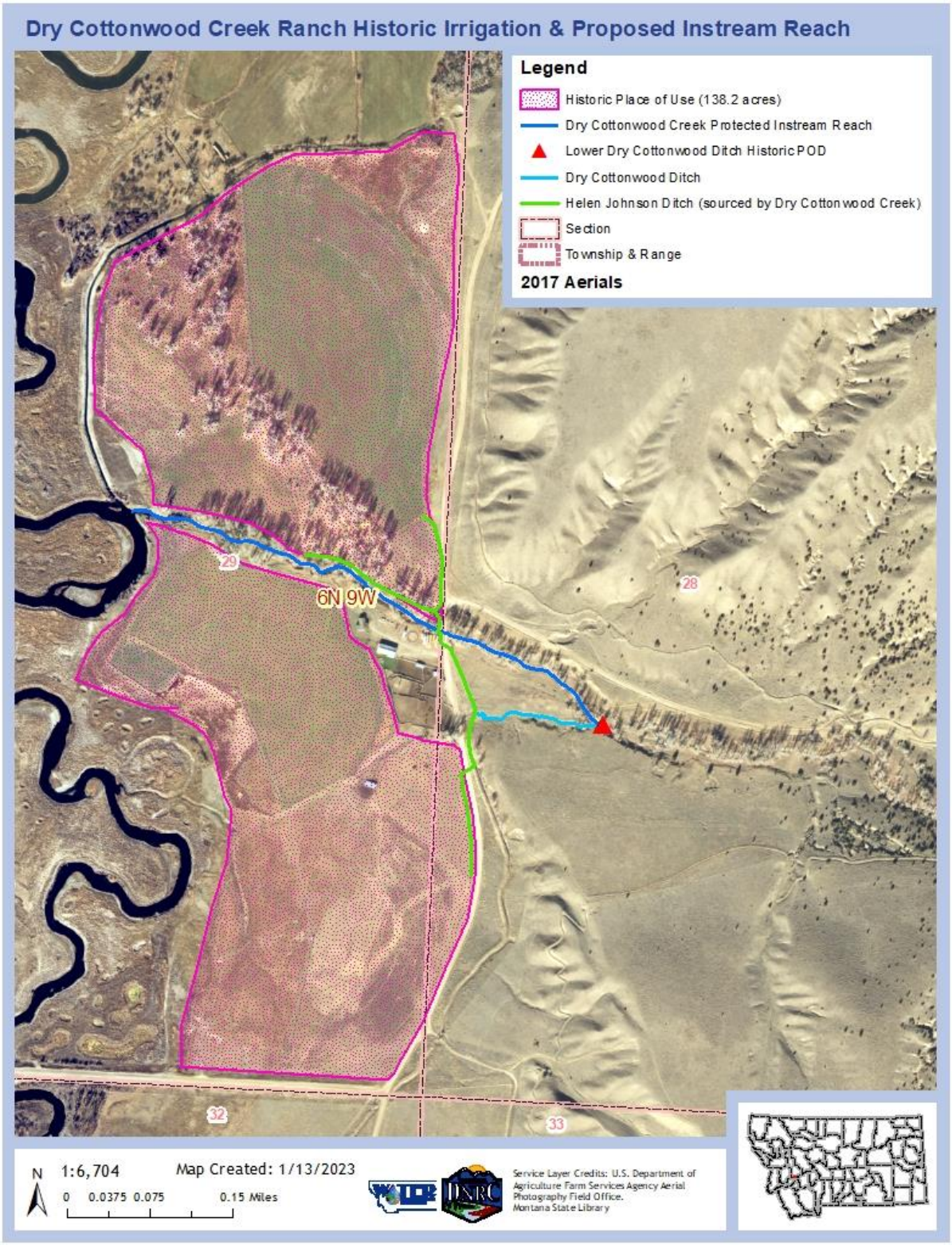
4. The Applicant withdrew Temporary Change Application (Application) No. 76G 30069061 which was originally submitted to change the purpose and place of use of Claim 76G 30103774 and supplemental Claim 76G 30103776 from irrigation to instream flow in Dry Cottonwood Creek.

This withdrawn application was submitted concurrently by the Applicant with Application 76G 30069060 which was authorized and issued by the Department on August 30, 2019. The PD to Grant Application 76G 30069060 included historic use findings for both Dry Cottonwood Creek water rights, including the claim being changed in this application.

CHANGE PROPOSAL

FINDINGS OF FACT

5. The Applicant proposes to temporarily change the purpose and place of use of Claim 76G 30103774 from irrigation to instream flow for the benefit of the fishery resource in Dry Cottonwood Creek, tributary to the Clark Fork River, in Deer Lodge County for a period of 10 years with the option to renew. During the term of this temporary change, this water right will no longer be used for irrigation on the historical 138.2-acre place of use. Instead, the proposed change will result in a new place of use consisting of a 0.5-mile instream reach of Dry Cottonwood Creek extending from the historic point of diversion at the Lower Dry Cottonwood Creek Ditch headgate (SENWSW of Section 28, T6N, R9W) to the confluence of Dry Cottonwood Creek and the Clark Fork River (SESWNE of Section 29, T6N R9W). After this change, the Applicant will appropriate a flow rate of up to 4.28 cubic feet per second (CFS) up to a maximum modified volume of 198.3 acre-feet (AF). The applicant proposed a maximum volume of 419.13 AF to be protected instream. The Department modified this volume to 198.3 AF based on the Department's historic use assessment of Claim 76G 30103774. The proposed instream period of use is May 6 to July 8. The historic place of use will continue to receive irrigation water with Claims 76G 30103776, 76G 30103778, and 76G 30103784 in accordance with the terms and conditions of Temporary Authorization 76G 30069060. Map 1 shows the elements of the proposed change.



Map 1. Dry Cottonwood Creek Ranch Historic Irrigation and Proposed Use of Claim 76G 30103774

CHANGE CRITERIA

6. The Department is authorized to approve a change if the applicant meets its burden to prove the applicable § 85-2-402, MCA, criteria by a preponderance of the evidence. Matter of Royston, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 33, 35, and 75, 357 Mont. 438, 240 P.3d 628 (an applicant's burden to prove change criteria by a preponderance of evidence is "more probably than not."); Town of Manhattan v. DNRC, 2012 MT 81, ¶8, 364 Mont. 450, 276 P.3d 920. Under this Preliminary Determination, the relevant change criteria in § 85-2-402(2), MCA, are:

> (2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:
>
> (a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.
>
> . . . .
>
> (c) The proposed use of water is a beneficial use.

7. In addition to the § 85-2-402(2), MCA,[1] an applicant for a temporary change authorization for instream flow must comply with the requirements and conditions set forth in §§ 85-2-407 and -408, MCA. Section 85-2-408, MCA provides in part:

> (1) The department shall accept and process an application for a temporary change in appropriation rights to maintain or enhance instream flow to benefit the fishery resource under the provisions of **85-2-402, 85-2-407,** and this section. The application must:
>
> (a) include specific information on the length and location of the stream reach in which the streamflow is to be maintained or enhanced; and
>
> (b) provide a detailed streamflow measuring plan that describes the point where and the manner in which the streamflow must be measured.
>
> (2) (a) A temporary change authorization under the provisions of this section is allowable only if the owner of the water right voluntarily agrees to:
>
> (i) change the purpose of a consumptive use water right to instream flow for the benefit of the fishery resource; or
>
> (ii) lease a consumptive use water right to another person for instream flow to benefit the fishery resource.
>
> (3) In addition to the requirements of **85-2-402** and **85-2-407,** an applicant for a change authorization under this section shall prove by a preponderance of evidence that:

[1]Pursuant to §85-2-402 (2)(b) and -402(2)(d), MCA, the Applicant is not required to prove that the proposed means of diversion, construction, and operation of the appropriation works are adequate and is not required to prove possessory interest in the place of use because this application involves a temporary change in appropriation right for instream flow pursuant to § 85-2-408 MCA.

(a) the temporary change authorization for water to maintain and enhance instream flow to benefit the fishery resource, as measured at a specific point, will not adversely affect the water rights of other persons; and

(b) the amount of water for the proposed use is needed to maintain or enhance instream flows to benefit the fishery resource.

(5) The department shall approve the method of measurement of the water to maintain and enhance instream flow to benefit the fishery resource through a temporary change authorization as provided in this section.

. . . .

(8) The maximum quantity of water that may be changed to maintain and enhance streamflows to benefit the fishery resource is the amount historically diverted. However, only the amount historically consumed, or a smaller amount if specified by the department in the lease authorization, may be used to maintain or enhance streamflows to benefit the fishery resource below the existing point of diversion.

8. Pursuant to §§ 85-2-407, and -408, MCA, a temporary change for authorization for instream flow is subject to special conditions which are identified above and addressed in the sections below. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. E.g., Hohenlohe, at ¶¶ 29-31; Town of Manhattan, at ¶ 8.

HISTORIC USE

FINDINGS OF FACT

9. The entirety of Claim 76G 30103774 was historically used for wild flood irrigation on 138.2 acres in the E2 of Section 29 and the W2W2SW of Section 28, T6N R9W. Temporary Change Authorization No. 76G 30069060 was issued by the Department on August 30, 2019, to change the purpose and a portion of the place of use of supplemental Claims 76G 30103784 and 76G 30103778 to instream flow for the benefit of the fishery resource in the Clark Fork River. The Department made historic use findings for Claim 76G 30103774 in the PD to Grant Application 76G 30069060 since it is historically 100% supplemental to the water rights changed under that authorization (as well as the other supplemental Dry Cottonwood Creek water right, Claim 76G 30103776). The Department found a maximum 138.2-acre historically irrigated place of use in the PD to Grant Application 76G 30069060, and the Applicant requested that the Department consider the same extent of historical irrigation in this application. Additional pre-1973 imagery submitted in the materials for this application further corroborate the requested extent of historical irrigation. The Department will adhere to the finding of 138.2 historically irrigated acres associated with Authorization 76G 30069060.

10. The historically consumed volume for this claim in this application is quantified using the methods outlined in ARM 36.12.1902(16). The Applicant requested that the Department consider the same management factor (100% as opposed to the historical standard of 77.6% for the Deer Lodge Weather Station in Powell County), flood evapotranspiration water requirement (13.14 inches for the Deer Lodge Weather Station in Powell County), and historic irrecoverable loss value (5% for flood irrigation) that were used in the Department's assessment of historic use for Change Authorization 76G 30069060. The Department will adhere to the use of these variables as they were considered in the historic use findings made for Authorization 76G 30069060.

11. The historic use findings made for Claim 76G 30103774 in the PD to Grant Application 76G 30069060 were based on a supplemental historic pattern of irrigation that attributed 24.2% of the water diverted from both Dry Cottonwood Creek and the Clark Fork River to irrigate the 138.2 acres to Claim 76G 30103774. The remaining volumes associated with irrigation of the historical place of use were attributed to the other three supplemental water rights listed in Table 2 above (FOF 11, PD to Grant Application 76G 30069060). The Applicant submitted a Historic Use Addendum (Form 606-HUA) with Form 606 that included additional information for the Department to consider in re-evaluating historic use for Claim 76G 30103774.

12. The pattern of irrigation informing the Department's apportionment of supplemental irrigation water in the PD to Grant Application 76G 30069060 reflected a seasonal scenario in which a greater proportion of the water diverted and conveyed to irrigate – rather than applied to – the 138.2-acre place of use was supplied from the Clark Fork River. In the historic use assessment completed in the PD to Grant Application 76G 30069060 the Department found that Claim 76G 30103774 contributed 53.9 AF or 8.9% of the total 605.2-AF historical field application volume associated with the irrigation of 138.2 acres, and supplemental Claim 76G 30103776 contributed 29 AF or 4.8% of the total historical field application volume. In the narrative response submitted with Form 606-HUA in this application, the Applicant explains that Dry Cottonwood Creek is a highly variable source of irrigation water and typically only provides for limited early season irrigation. In their Deficiency Letter response, the Applicant clarifies that during some seasons water from Dry Cottonwood Creek accounted for 31% of the total amount of seasonal irrigation water. The Department will consider a modified, alternative scenario where, during some seasons, 31% of the water used on (that is, applied to instead of just all water diverted to irrigate) the historical place of use originated in Dry Cottonwood Creek (with both Claim 76G 30103774 and supplemental Claim 76G 30103776) . The source water proportionality in the Department's re-evaluation of historical use for Claim 76G 30103774 will therefore reflect a scenario in which water diverted from Dry Cottonwood Creek comprised 31% of the entire seasonal field application

and consumed volumes. Based on information submitted with Form 606-HUA regarding the priority of Claims 76G 30103774 and 76G 30103776 and how they were used for irrigation, the water right being changed comprised 80.62% of the water diverted from Dry Cottonwood Creek to irrigate the historic place of use, while supplemental Claim 76G 30103776 accounts for the remaining 19.38% of Dry Cottonwood Creek supplemental diversions.

13. The Applicant requested that the Department consider 2010 crop records to support a historical on-farm irrigation efficiency of 15%. In their Form 606-HUA narrative response, the Applicant refers to a Utah State University Report on Small Acreage Irrigation Management (Neibling, 1997), which provides a range of wild flood irrigation on-farm efficiencies ranging between 15% to 35%. The Applicant states that the uneven topography of the historical place of use "makes water difficult to spread via wild flood in places, the soils are sandy/gravelly loam that rapidly infiltrate water and there is generally a high resistance to water flow due to high plant density that requires addition [sic] water or head to spread water effectively across the place of use" (Form 606-HUA narrative response p. 2). The Department routinely considers systems that depend on wild flood methods of irrigation to be those that involve poor water distribution (very few to no secondary laterals/on-farm ditches), have high slopes, and consistently permeable surface and subsurface soils. The Department's standard on-farm efficiency value of 25% selected for wild flood irrigation is based on the same Neibling (1997) report referenced in the application materials. The Applicant further refers to an affidavit from John Thomas (lessee of the place of use from December 1973 to 1980) confirming that "the current ditches and irrigation methods, which dictate on-farm efficiency, are representative of historic practices and efficiencies". Modern aerial photography provides clear evidence of secondary laterals that provide greater control over the manner in which water is distributed throughout the place of use, as does the Applicant's description of "a maze of on-farm ditches". Based on this information the Department does not consider the use of a 15% on-farm efficiency value in lieu of the 25% value that has already been used in the historic use assessment of the same historical place of use in Authorization 76G 30069060 to be substantial and credible. The Department considers a modified 25% on-farm efficiency value in line with the existing historic use findings for the 138.2-acre place of use (FOF 11 in PD to Grant Application 76G 30069060).

14. Based on the information in FOF Nos. 9-13 in this PD, the Department reaffirms the historic use findings made in the PD to Grant Application 76G 30069060 related to the total amount of water applied to and consumed during irrigation of the 138.2-acre place of use (FOF 11) and finds the historical field application and consumed volumes associated with irrigation of the place of use to be 605.2 AF and 181.6 AF, respectively (Table 3). Based on the information

provided in FOF 12 in this PD, the 31%-portion of the total historical field application and consumed volumes for this place of use that are attributed to water diverted from Dry Cottonwood Creek are a modified 187.6 AF and 56.3 AF, respectively. The Department finds the 80.62%-portions of the field application and consumed volumes from Dry Cottonwood Creek to irrigate the historical 138.2-acre place of use that are attributed to Claim 76G 30103774 are 151.3 AF and 45.4 AF, respectively. This results in Claim 76G 30103774 contributing 25% of the total historical field application and consumed volumes associated with irrigation of the historical place of use under the modified irrigation scenario where Dry Cottonwood Creek water contributes 31% of these volumes (see FOF 12). These volumes, along with the variables used in their calculation, are summarized in Tables 3 and 4. For a seasonal scenario in which Clark Fork River Claims 76G 30103778 and 76G 30103784 account for a greater proportion of the irrigation pattern and historically consumed volume (HCV) calculations for supplemental Claims 76G 30103778, 76G 30103784, 76G 30103780, 76G 30103781, and 76G 30103780, see PD to Grant Change Application No. 76G 30069060.

Table 3. Modified historic consumed volume (HCV) and field application volume findings made for the 138.2-acre historical place of use in the PD to Grant Change Application No. 76G 30069060:

Powell County Flood ET (inches)	Historic Management Factor *(percent)*	Historically Irrigated Acres	HCV (Excluding IL) (AF)	On- Farm Efficiency *(percent)*	Field Application (AF)	Historic Irrecoverable Losses (AF) *(IL):* *Flood 5%*	Place of Use HCV (*Including IL)* (AF)
13.14	100%	138.2	151.3	25%	605.2	30.3	181.6

Table 4. Modified apportionment of historic field application and consumed volumes for Dry Cottonwood Creek Claim 76G 30103774 and supplemental Claim 76G 30103776:

WR No.	Flow Rate (CFS)	% Flow from Source	Historical Field Application by Water Right (AF)	HCV by Water Right (AF)
76G 30103774	4.28	80.62%	151.3	45.4
76G 30103776	5.49	19.38%	36.4	10.9

15. Claim 30103774 was historically diverted at the Lower Dry Cottonwood Ditch headgate located in the SENWSW of Section 28, T6N R9W, and conveyed to the historic place of use via the Dry Cottonwood Ditch. The general abstract for the water right being changed also lists a diversion in the SWSESE of Section 28, T6N 9RW. According to narrative in the application materials, this “upper point of diversion” was not historically used by Claims 76G 30103774 and 76G 30103776, but rather used by the portions of their parent claims (Claims 76G 40507-00 and 76G 40508-00, respectively) that serviced 37 acres in the former Deer Lodge River Ranch. The child water rights associated with this upper point of diversion (Claims 76G 30103775 and 76G 30103777) were dismissed by the Montana Water Court following the split from the parent claims

on November 17, 2015. The Department will not assess historic use for the upper point of diversion (in the SWSESE Section 28), and historic use will be analyzed with the lower point of diversion of the (Lower) Dry Cottonwood Ditch (in the SENWSW of Section 28) as the only historical means of conveyance.

16. The Department's assessment of the historically diverted volume of Claim 76G 30103774 will consider the finding made for a maximum capacity of 31.4 CFS for the Lower Dry Cottonwood Ditch per FOF 11 in the PD to Grant Application 76G 30069060. In the narrative response for this application, the Applicant also refers to using Manning's equation and a roughness coefficient (*n*) of 0.03 as additional evidence supporting this 31.4-CFS ditch capacity. The Dry Cottonwood Ditch is also listed as being shared by supplemental Claim 76G 30103776 and parent Claims 76G 40507-00 and 76G 40508-00. The elements of the water rights that list the Dry Cottonwood Ditch as a means of conveyance are shown in Table 5; the two parent claims are not listed as the only other child rights associated with these claims have been dismissed by order of the Montana Water Court and are not active water rights. Based on this information the Department finds the maximum historical flow rate of Claim 76G 30103774 to be 4.28 CFS.

Table 5. Water Rights within the Lower Dry Cottonwood Ditch:

WR Number	Purpose	Flow Rate	Period of Use	Point of Diversion	Place of Use	Priority Date	Owner
76G 30103774	Irrigation	4.28 CFS	3/4-11/4	SENWSW, SWSESE Sec. 28, T6N R9W	Sec. 20, 21, 28, 29, T6N R9W	2/12/1883	Clark Fork Coalition
76G 30103776		5.49 CFS	3/1-11/4			6/4/1902	Stefanie A Forcella, Tracy L Forcella

17. The Applicant submitted Form 606-HUA, requesting that the Department deviate from the standard methodologies presented in ARM 36.12.1902(10) in its re-assessment of the historical diverted volume of Claim 76G 30103774. The information provided by the Applicant to substantiate their historical diverted volume calculation of 419.13 AF for Claim 76G 30103774 (and 519.9 AF for both Dry Cottonwood Creek claims) consists of diversion records from May 6 to July 9, 2010, John Thomas' affidavit in which he states 2010 practices resembled historical operations during his time as the property leasee, and NRCS SNOTEL Snow Water Equivalent (SWE) data collected at the Peterson Meadows site from 1966 to 2019 which are intended to demonstrate that Dry Cottonwood Creek water availability in 2010 was representative of "average historic conditions". According to the Applicant, a comparison of the 1966 to 2019 SWE average of 10.4 inches, the 1966 to 1973 SWE average of 12.4 inches, and the April 2010 SWE of 9.3 inches demonstrates that 2010 was "more than likely a representative water year of historic conditions". A more detailed evaluation of the submitted SNOTEL data was conducted by DNRC Surface Water Hydrologist Troy Lechman and summarized in a report dated April 27, 2022. In his

report, Mr. Lechman explains that while April and May 2010 SWE values are slightly below average, the June 2010 SWE value of 10.6 inches is approximately 10.3 inches higher than the historical (1966 – 1973) mean for June (0.3 inches), and 9.9 inches higher than the median for June over the entire period of record (0.7 inches). Mr. Lechman's report concludes that 2010 was an above-average year with snowpack (and therefore, water availability) remaining well above the historical average from May 6 through June 19. Based on this evaluation the Department does not consider the submitted SNOTEL SWE data and corresponding evidence to be substantial and credible in demonstrating that the Applicant's 2010 diversions from Dry Cottonwood Creek are representative of historical operations.

18. As provided by the Applicant in this application and considered in the historic diverted volume findings for Claim 76G 30103774 in the PD to Grant Application 76G 30069060, a ditch loss rate of 23.7% for the Lower Dry Cottonwood Ditch was used by the Department to re-evaluate conveyance losses in a seasonal scenario where 31% of field applied irrigation water for the historical place of use was supplied from Dry Cottonwood Creek (FOF 12 in this PD). In the application materials for this application, the Applicant provides ditch diversion measurements reaffirming the loss rate of 23.7% used for Temporary Authorization 76G 30069060. Pursuant to ARM 36.12.1902(10), the historical diverted volume is equal to the sum of the field application volume and volume of conveyance losses; however, the Department will adhere to the same methodology considered in the findings for PD to Grant Application 76G 30069060 and that deviates from ARM which considers conveyance losses to comprise a measured percentage (23.7%) of total diversions rather than a separately calculate volume. Based on this information, the Department finds the modified historically diverted volume for the water right being changed is calculated as 151.3 AF Historical Field Application Volume ÷ (1 – 0.237) = 198.3 AF (Table 6).

Table 6. Re-apportioned historic diverted volumes for Claim 76G 30103774 and supplemental Dry Cottonwood Creek Claim 76G 30103776:

WR No.	Field Application Volume (AF)	Ditch Loss Rate	HDV (AF)
76G 30103774	151.3	23.7%	**198.3**
76G 30103776	36.4		**47.7**

19. The Department finds the following historic use for Claim 76G 30113774.

Table 7. Re-apportioned historic diverted volumes for Claim 76G 30103774 and supplemental Dry Cottonwood Creek Claim 76G 30103776:

WR No. (Priority Date)	Historic Flow rate	Historic Diverted Volume	Historic Field Application Volume	Historic Consumed Volume	Historic Place of Use	Historic Point of Diversion
76G 30103774 (2/12/1883)	4.28 CFS	198.3 AF	151.3 AF	45.4 AF	E2 S. 29, W2S2SW S. 28, T6N R9W	SENWSW S. 28, T6N R9W
76G 30103776 (6/4/1902)	5.49 CFS	47.7 AF	36.4 AF	10.9 AF		

ADVERSE EFFECT

FINDINGS OF FACT- Proposed Use

20. During the term of this proposed temporary change, the 138.2-acre historical place of use in the E2 Section of 29 and the W2W2SW of Section 28, T6N R9W will not be irrigated with Claim 76G 30103774. The Applicant proposes to appropriate up to the entire historically diverted volume of 198.3 AF instream beginning on or after May 6. The proposed period of use is May 6 to July 8. The 0.5-mile instream place of use begins at the historic point of diversion at the Lower Dry Cottonwood Ditch headgate in the SENWSW of Section 28, T6N R9W, and ends at the confluence of Dry Cottonwood Creek and the Clark Fork River in the SESWNE of Section 29, T6N R9W.

21. During the term of this temporary change and pursuant to the irrigation operations approved with active Temporary Authorization 76G 30069060, 51.21 of the historically irrigated 138.2 acres will be retired from irrigation. The remaining 86.99 acres will continue to be irrigated with Claims 76G 30103776, 76G 30103778, 76G 30103782, and 76G 30103784 via the following authorized operation under currently active Temporary Authorization 76G 30069060:

- 68.7 acres will be irrigated with a center pivot with water diverted from the Clark Fork River via the current Alvi-Beck pump station using Claims 76G 30103778, 76G 30103782, and 76G 30103784;
- 11.77 acres that cannot be reached by pivot will be flood irrigated from April 1 and June 30, and hand-line sprinkler irrigated from July 1 to October 10. Irrigation water for these 11.77 acres will be sourced from Dry Cottonwood Creek with Claim 76G 30103776 while streamflows in the creek exceed 4.28 CFS, and from the Clark Fork River via the Alvi-Beck pump station using Claims 76G 30103778, 76G 30103782, and 76G 30103784 when flows in the creek are less than 4.28 CFS and Claim 76G 30103776 is out of priority;
- 6.52 acres that cannot be reached by pivot will be flood irrigated from April 1 to June 30 with water diverted from Dry Cottonwood Creek with Claim 76G 30103776 while streamflows in the creek exceed 4.28 CFS. These acres will not be irrigated when streamflows in the creek are less than 4.28 CFS and Claim 76G 30103776 is out of priority.

22. In re-assessing historic use for Claim 76G 30103774, a scenario was considered in which water diverted from Dry Cottonwood Creek contributed 31% of the historical field application (rather than diverted) volumes found by the Department for the 138.2-acre historical place of use in the PD to Grant Application 76G 30069060. In this historic use reassessment, Claim 76G 30103774 contributes 151.3 AF or 25% (vs. 53.9 AF and 8.9% found in the PD to Grant Application 76G 30069060) of the total 605.2-AF historical field application volume, and

supplemental Claim 76G 30103776 contributes 36.4 AF or 6% (vs. 29 AF or 4.8% found in the PD to Grant Application 76G 30069060) of the 605.2-AF field application volume. The finding made in the PD to Grant Application 76G 30069060 for the total amount of water that needed to be diverted from both Dry Cottonwood Creek (108.6 AF with Claims 76G 30103774 and 76G 30103776) and the Clark Fork River via the Helen Johnson Ditch (990 AF with Claims 76G 30103778 and 76G 30103784) to irrigate the historical place of use is 1,098.6 AF.

23. The Applicant proposes to concurrently appropriate up to the re-evaluated historical diverted volume of 198.3 AF instream in Dry Cottonwood Creek with Claim 76G 30103774 as well as the 990 AF volume currently authorized to be appropriated instream in the Clark Fork River with Claims 76G 30103778 and 76G 30103784. In a letter written to the Applicant on January 15, 2019, regarding the withdrawal of Application 76G 30069061, the Department reiterated that the apportionment of the historical use findings made in the PD to Grant Application 76G 30069060 was based upon the supplemental relationships between all of the water rights originally proposed for change (including Claim 76G 30103774), and the historical use findings for all four claims are still relevant. In other words, the historical use findings made for the two supplemental Clark Fork River water rights were based on a scenario in which the majority of the water used to irrigate the historical 138.2-acre place of use was diverted from the Clark Fork River and a maximum seasonal volume of 108.6 AF was diverted from Dry Cottonwood Creek. The Department is not re-evaluating historical use for Claims 76G 30103778 and 76G 30103784 because of their active temporary change authorization and the absence of a new, pending change application presenting additional information in tandem with such a request.

24. The historic use findings made in the PD to Grant Application 76G 30069060 – and which are upheld in active Temporary Authorization 76G 30069060 – correspond with a maximum volume of 1,098.6 AF of water that must be diverted from both Dry Cottonwood Creek and the Clark Fork River to irrigate the historical place of use. The maximum amount of water that may be appropriated instream in Dry Cottonwood Creek with Claim 76G 30103774 during the term of this temporary change is 4.28 CFS up to the historically diverted volume of 198.3 AF. While the amount of water required for irrigation of the 138.2 acres does not change year to year for the purposes of our historical use assessment pursuant to historical IWR standards, the source of that irrigation water and the amount of water diverted from each source that is then consumed during irrigation was not historically the same year to year. That is, diversions from the Clark Fork River decreased in seasons when irrigation water from Dry Cottonwood Creek comprised a more substantial portion of what was being applied to and consumed on the field. Based on the information in this PD, the re-evaluated historically diverted and consumed volumes attributed to Dry Cottonwood Creek that are larger than the findings made in the PD to Grant Application 76G

30069060 were only possible when water from the Clark Fork River made up a smaller portion of historical consumption and diversion. The appropriation of the full historical extent of Claims 76G 30103778 and 76G 30103784 (Clark Fork River) under active Temporary Authorization 76G 30069060 and the re-evaluated historical extent of Claim 76G 30103774 found in this PD in the same year would result in an expansion of historic use.

25. To prevent adverse effect resulting from an expansion of historic use and the existence of two contradicting active change authorizations, in aggregate the maximum volume of water that may be annually appropriated instream in the Clark Fork River with Claims 76G 30103778 and 76G 30103784 and in Dry Cottonwood Creek with Claim 76G 30103774 cannot exceed the 1,060.6-AF historically diverted volume (990 AF from Claims 76G 30103778 and 76G 30103784 + 70.6 AF from Claim 76G 30103774, excluding supplemental Dry Cottonwood Creek Claim 76G 30113776) found for these three water rights in the PD to Grant Application 76G 30069060. In the instance the Applicant plans to appropriate the full 990-AF instream volume currently authorized for the Clark Fork River, the maximum volume that may be appropriated instream in Dry Cottonwood Creek with Claim 76G 30103774 is 70.6 AF. Conversely, in the instance the Applicant plans to appropriate the full 198.3-AF instream volume being granted in this PD, the maximum volume that may be appropriated instream in the Clark Fork River without an expansion of historic use or creating a new appropriation of water is 862.3 AF. This application is subject to the following condition:

IN AGGREGATE, THE MAXIMUM VOLUME OF WATER THAT WILL BE ANNUALLY APPROPRIATED IN DRY COTTONWOOD CREEK WITH STATEMENT OF CLAIM 76G 30103774 (198.3 AF) AND IN THE CLARK FORK RIVER WITH STATEMENT OF CLAIM NOS. 76G 30103778 AND 76G 30103784 (990 AF COMBINED) CANNOT EXCEED 1,060.6 AF WHILE TEMPORARY CHANGE AUTHORIZATION NOS. 76G 30145973 AND 76G 30069060 ARE BOTH ACTIVE.

FINDINGS OF FACT- Return Flows

26. During the term of this temporary change, Claim 76G 30103774 will no longer be used to irrigate the historical 138.2-acre place of use which will continue to be irrigated with Claim 76G 30103776 (Dry Cottonwood Creek) and Claims 76G 30103778 and 76G 30103784 (Clark Fork River) pursuant to the operation approved under active Authorization 76G 30069060. In FOF 14 of the PD to Grant Application 76G 30069060, the Department found that return flows historically showed up in the Clark Fork River adjacent to the historical place of use below the Galen Road Bridge, and that any changes in return flows resulting from irrigation under the now-active change authorization would not result in adverse effect to other water right owners in the Clark Fork River or Dry Cottonwood Creek. The Department will not re-evaluate return flows for the purposes of

this Preliminary Determination based on this information, and because the Applicant is not proposing any changes to the currently authorized operation of the historical place of use. Additionally, because return flows were not found in the PD to Grant Application 76G 30069060 to have historically accreted in Dry Cottonwood Creek (and therefore no other users in Dry Cottonwood Creek would have historically relied on return flows for their appropriation of water), the entire historically diverted volume of 198.3 AF is available to be appropriated in the entire proposed instream place of use with Claim 76G 30103774 as granted (with modifications) in this Preliminary Determination.

27. The only active water right with a point of diversion located in the proposed 0.5-mile instream place of use beginning at the historical point of diversion in Dry Cottonwood Creek is historically supplemental Claim 76G 30103776. The elements of this water right are provided in Table 2 above. This junior water right (supplemental Claim 76G 30103776) will only be in priority and in use for irrigation when streamflows in Dry Cottonwood Creek as measured at the Lower Dry Cottonwood Ditch headgate exceed 4.28 CFS.

28. The Lower Dry Cottonwood Ditch point of diversion consists of a headgate that allows for the control of continued irrigation diversion into the ditch. The headgate will allow for adjustments to the diverted flow rate to ensure that the water being changed to instream use in Dry Cottonwood Creek is not still being diverted into the Lower Dry Cottonwood Ditch. It will be the responsibility of the remaining Dry Cottonwood Ditch water user to ensure that they are only diverting their legal flow rates into the ditch.

29. The Applicant will monitor flows at the beginning of the instream place of use at the Lower Dry Cottonwood Ditch headgate using a staff gage every two weeks beginning May 6 and continuing through the period in which Dry Cottonwood Creek is flowing. As the need to make call approaches, the Applicant will begin collecting streamflows on a minimum weekly basis. This application will be subject to the following measurement condition:

DURING THE TERM OF THIS TEMPORARY CHANGE THE APPROPRIATOR WILL APPROPRIATE UP TO 4.28 CFS AND A MAXIMUM VOLUME OF 198.3 AF INSTREAM WITH STATEMENT OF CLAIM 76G 30103774. STREAMFLOWS WILL BE MEASURED BIWEEKLY BY THE APPROPRIATOR WITH A DEPARTMENT-APPROVED METHOD BEGINNING MAY 6. AS THE NEED TO MAKE CALL APPROACHES THE APPROPRIATOR SHALL MEASURE STREAMFLOWS ON A MINIMUM WEEKLY BASIS. THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER APPROPRIATED INSTREAM. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR TO THE WATER RIGHTS BUREAU CENTRAL OFFICE UNTIL A PROJECT COMPLETION NOTICE IS RECEIVED BY THE DEPARTMENT, AND UPON REQUEST THEREAFTER. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THIS CHANGE. FAILURE TO SUBMIT MEASUREMENT REPORTS MAY RESULT IN REVOCATION OF THIS CHANGE.

30. The Department may approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the proposed change will not adversely affect the use of existing perfected water rights pursuant to § 85-2-402(2)(a), MCA. In addition, the Applicant must demonstrate that "the temporary change authorization for water to maintain and enhance instream flow to benefit the fishery resource, as measured at a specific point, will not adversely affect the water rights of other persons." § 85-2-408(3)(a), MCA. If any water right holder believes they will be adversely affected by a change in timing and the amount of return flows resulting from this proposal, they may file an objection to the proposed project pursuant to §§ 85-2-307(3), and -308, MCA. Based on its analysis and guidance provided by policy, the Department preliminarily finds that the changes to return flows resulting from the proposed change will not cause an adverse effect to other water users.

31. The Department finds there will be no adverse effect to other water users resulting from the proposed change under the terms and conditions set out in this Preliminary Determination.

BENEFICIAL USE

FINDINGS OF FACT

32. The Applicant proposes to temporarily change the purpose and place of use of Claim 76G 30103774 to instream flow to enhance streamflows for the benefit of the fishery resource in Dry Cottonwood Creek for a period of 10 years with the option to renew. The Applicant will appropriate a flow rate of up to 4.28 (CFS) up to a maximum modified volume of 198.3 (AF).

33. The Upper Clark Fork River Basin is categorized as "Chronically Dewatered" by the Montana Department of Fish, Wildlife, and Parks (FWP). FWP established a minimum recommended flow rate of 40 CFS for the section of the Clark Fork River to which Dry Cottonwood Creek is tributary, and a target flow rate of 180 CFS in their 1986 Water Reservation for the Clark Fork River from Galen to Deer Lodge. The Applicant provided a letter from former Montana Department of Fish, Wildlife and Parks (FWP) biologist Jason Lindstrom dated March 4, 2014, stating that increased streamflows are needed within Dry Cottonwood Creek to support the limited westslope cutthroat trout population in the Clark Fork River.

34. Pursuant to § 85-2-102(5)(d), MCA, the use of a water right through a temporary change or lease to enhance instream flows to benefit a fishery resource in accordance with § 85-2-408, MCA, is considered a beneficial use of water. The Department finds the proposed temporary instream appropriation of 4.28 CFS and up to 198.3 AF in Dry Cottonwood Creek for the purpose of enhancing and augmenting streamflows for the benefit of the fishery resource in Dry Cottonwood Creek and the Upper Clark Fork River Basin to be a beneficial use of water.

ADEQUATE DIVERSION

FINDINGS OF FACT

35. The proposed temporary change of Claim 76G 30103774 is to maintain and enhance streamflows to benefit the trout fishery in Dry Cottonwood Creek and does not require a means of conveyance. Per § 85-2-402(2)(b)(ii), MCA, a temporary change in appropriation right for instream flow pursuant to § 85-2-408, MCA, is exempt from meeting the adequacy of diversion criterion.

POSSESSORY INTEREST

FINDINGS OF FACT

36. Pursuant to § 85-2-402(2)(d)(ii), MCA, the Applicant is not required to prove that they have a possessory interest, or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use because this application involves a temporary change in appropriation right for instream flow per § 85-2-408, MCA.

TEMPORARY INSTREAM REACH/MEASUREMENT PLAN

FINDINGS OF FACT

37. The Applicant is proposing to temporarily change the purpose and place of use of Claim 76G 30103774 to instream flow for the benefit of the fishery resource in Dry Cottonwood Creek for a period of 10 years with the option to renew. During the term of this temporary change a flow rate of 4.28 CFS and maximum volume of 198.3 AF will be appropriated in a 0.5-mile reach of Dry Cottonwood Creek beginning at the historic point of diversion in the SENWSW of Section 28, T6N R9W and ending at the confluence of Dry Cottonwood Creek and the Clark Fork River (SESWNE of Section 29, T6N R9W). The proposed period of use for the instream flow purpose is May 6 to July 8. The Applicant will appropriate a flow rate of up to 4.28 (CFS), up to a maximum volume of 198.3 (AF).

38. During the term of this temporary change and while Authorization 76G 30069060 is active, the maximum volume that may be appropriated annually in the Clark Fork River with Claims 76G 30103778 (445.5 AF) and 76G 30103784 (545.5 AF) and in Dry Cottonwood Creek with Claim 76G 30103774 (198.3 AF) is 1,060.6 AF (see FOF 22).

39. The Applicant will monitor the flow rate and volume appropriated instream at the historic point of diversion using a staff gage in Dry Cottonwood Creek every two weeks beginning May 6. In the instance the need to make call on upstream junior water users approaches, the Applicant will collect streamflow measurements at the beginning of the instream place of use on a minimum

weekly basis. Measured streamflows will be reported to the Central Office of the Water Resources Division until a Project Completion Notice (Form 618) is received, and upon request by the Department thereafter.

40. The Department finds the Applicant has met the additional requirements for a temporary change in appropriation right to maintain or enhance the instream flow to benefit a fishery resource under the provisions of § 85-2-408, MCA.

CONCLUSIONS OF LAW

HISTORIC USE AND ADVERSE EFFECT

41. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to an existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. McDonald v. State, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986)(beneficial use constitutes the basis, measure, and limit of a water right); Featherman v. Hennessy, 43 Mont. 310, 316-17, 115 P. 983, 986 (1911)(increased consumption associated with expanded use of underlying right amounted to new appropriation rather than change in use); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940)(appropriator may not expand a water right through the guise of a change – expanded use constitutes a new use with a new priority date junior to intervening water uses); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924)("quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only"); Town of Manhattan, at ¶ 10 (an appropriator's right only attaches to the amount of water actually taken and beneficially applied); Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* Pg. 9 (2011)(the rule that one may change only that to which it has a right is a fundamental tenet of Montana water law and imperative to MWUA change provisions); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer

Land Co, LLC, DNRC Proposal For Decision and Final Order (2004).[2]

42. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 96 P. 727, 731 (1908); Quigley, 110 Mont. at 505-11,103 P.2d at 1072-74; Matter of Royston, 249 Mont. at 429, 816 P.2d at 1057; Hohenlohe, at ¶¶43-45.[3]

43. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the "historic use" of the water right being changed. Town of Manhattan, at ¶10 (recognizing that the Department's obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.[4] A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. Quigley, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); Royston, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record

[2] DNRC decisions are available at:
http://www.dnrc.mt.gov/wrd/water_rts/hearing_info/hearing_orders/hearingorders.asp

[3] See also Holmstrom Land Co., Inc., v. Newlan Creek Water District,185 Mont. 409, 605 P.2d 1060 (1979); Lokowich v. Helena, 46 Mont. 575, 129 P. 1063(1913); Thompson v. Harvey, 164 Mont. 133, 519 P.2d 963 (1974)(plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); McIntosh v. Graveley, 159 Mont. 72, 495 P.2d 186 (1972)(appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909)(successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); and, Gassert v. Noyes, 18 Mont. 216, 44 P. 959(1896)(change in place of use was unlawful where reduced the amount of water in the source of supply available which was subject to plaintiff's subsequent right).

[4] A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The claim does not constitute *prima facie* evidence of historical use in a change proceeding under §85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. §85-2-234, MCA

could not sustain a conclusion of no adverse effect because the applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); Hohenlohe, at ¶44-45; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, *Order Re Petition for Judicial Review,* Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); Matter of Application For Beneficial Water Use Permit By City of Bozeman, *Memorandum*, Pgs. 8-22 (Adopted by DNRC *Final Order* January 9,1985)(evidence of historic use must be compared to the proposed change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).[5]

44. An applicant must also analyze the extent to which a proposed change may alter historic return flows for purposes of establishing that the proposed change will not result in adverse effect. The requisite return flow analysis reflects the fundamental tenant of Montana water law that once water leaves the control of the original appropriator, the original appropriator has no right to its use and the water is subject to appropriation by others

45. Although the level of analysis may vary, analysis of the extent to which a proposed change may alter the amount, location, or timing return flows is critical in order to prove that the proposed change will not adversely affect other appropriators who rely on those return flows as part of the source of supply for their water rights. Royston, 249 Mont. at 431, 816 P.2d at 1059-60;

[5] Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District, 717 P.2d 955, 959 (Colo. 1986)("[O]nce an appropriator exercises his or her privilege to change a water right … the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right … which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right."); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo.,1999); Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo. 2002)("We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation); Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right … he shall file a petition requesting permission to make such a change …. The change … may be allowed provided that the quantity of water transferred … shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 -566 (Wyo,1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

Hohenlohe, at ¶¶ 45-6 and 55-6; Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731.

46. While evidence may be provided that a particular parcel was irrigated, the actual amount of water historically diverted and consumed is critical. E.g., *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, DNRC Proposal for Decision adopted by Final Order (2005). The Department cannot assume that a parcel received the full duty of water or that it received sufficient water to constitute full service irrigation for optimum plant growth. Even when it seems clear that no other rights could be affected solely by a particular change in the location of diversion, it is essential that the change also not enlarge an existing right. See MacDonald, 220 Mont. at 529, 722 P.2d at 604; Featherman, 43 Mont. at 316-17, 115 P. at 986.

47. The Department's rules reflect the above fundamental principles of Montana water law and are designed to itemize the type evidence and analysis required for an applicant to meet its burden of proof. ARM 36.12.1901 through 1903. These rules forth specific evidence and analysis required to establish the parameters of historic use of the water right being changed. ARM 36.12.1901 and 1902. The rules also outline the analysis required to establish a lack of adverse effect based upon a comparison of historic use of the water rights being changed to the proposed use under the changed conditions along with evaluation of the potential impacts of the change on other water users caused by changes in the amount, timing, or location of historic diversions and return flows. ARM 36.12.1901 and 1903.

48. The Department has adopted rules providing for the calculation of historic diverted and consumptive volumes where the applicant proves by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902 (16). In the alternative an applicant may present their own evidence of historic beneficial use with a Historic Use Addendum. In this case Applicant has elected to submit a Historic Use Addendum. (FOF No. 11).

49. Based upon the Applicant's evidence of historic use and the department's analysis of historic use, the Applicant has proven by a preponderance of the evidence the historic use of Water Right Claim 76G 30103774 to be 198.3 AF diverted volume and 4.28 CFS with a consumptive use of 45.4 AF. (FOF Nos. 9-15)

50. The Applicant established that the change authorization will be operated in a manner that ensures the amount of water protected instream does not exceed the maximum volume and flow rate during the period of use for the change authorization. Furthermore, the Applicant identified the reach in which instream flows will be protected and provided a detailed measurement plan to ensure that, as conditioned, the change authorization is operated in compliance with § 85-2-408(1) and (8), MCA. (FOF Nos. 37-40)

51. Based upon the Applicant's comparative analysis of historic water use and return flows to water use and return flows under the proposed change, the Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. § 85-2-402(2)(b), MCA. (FOF Nos. 20-28)

BENEFICIAL USE

52. A change applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. §§ 85-2-102(4) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: "[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana . . ." McDonald, 220 Mont. at 532, 722 P.2d at 606. The analysis of the beneficial use criterion is the same for change authorizations under § 85-2-402, MCA, and new beneficial permits under § 85-2-311, MCA. ARM 36.12.1801. The amount of water that may be authorized for change is limited to the amount of water necessary to sustain the beneficial use. Section 85-2-408(3)(b), MCA.

53. Applicant proposes to use water for instream flow, which is a recognized beneficial use of water. § 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence instream flow is a beneficial use and that 198.3 AF of diverted volume and 4.28 CFS flow rate of water requested is the amount needed to sustain the beneficial use and is within the standards set by DNRC Rule. § 85-2-402(2)(c), MCA (FOF Nos. 32-34)

ADEQUATE MEANS OF DIVERSION

54. Pursuant to § 85-2-402 (2)(b), MCA, the Applicant is not required to prove that the proposed means of diversion, construction, and operation of the appropriation works are adequate because this application involves a temporary change in appropriation right for instream flow pursuant to § 85-2-408, MCA. (FOF No. 35)

TEMPORARY PROTECTED REACH/MEASUREMENT PLAN

55. For a change in appropriation right to maintain or enhance instream flow to benefit the fishery resource, an applicant must "(a) include specific information on the length and location of the stream reach in which the streamflow is to be maintained or enhanced; and... (b) provide a

detailed streamflow measuring plan that describes the point where and the manner in which the streamflow must be measured." § 85-2-408(1), MCA.

56. The Department has determined that the Applicant may protect up to 198.3 AF of historically diverted water at a flow rate of 4.28 CFS from the historical point of diversion in the SENWSW of Section 28, T6N R9W to the confluence of Dry Cottonwood Creek and the Clark Fork River in the SESWNE of Section 29, T6N R9W in Deer Lodge County. The Department concludes the length and location of the stream reach in which instream flows will be maintained and enhanced along with the measurement plan satisfy the additional requirements of § 85-2-408(1), MCA. (FOF Nos. 37-40).

PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 76G 30145973 should be granted in modified form subject to the following.

The Department authorizes the Applicant to temporarily change the purpose and place of use of Statement of Claim 76G 30103774 from irrigation to instream flow for the benefit of the fishery resource in Dry Cottonwood Creek for a period of up to 10 years. During the term of this temporary change Claim 76G 30103774 will no longer be used for irrigation of the historical 132.8-acre place of use which will continue being irrigated with Claims 76G 30103776, 76G 30103778, and 76G 30103784 pursuant to the operation approved by Temporary Change Authorization No. 76G 30069060. The proposed period of use is May 6 to July 8 during which the Applicant will appropriate a flow rate of up to 4.28 cubic feet per second (CFS), up to a maximum volume of 198.3 acre-feet (AF). The instream place of use in Dry Cottonwood Creek extends from the historic point of diversion at the Lower Dry Cottonwood Ditch headgate in the SENWSW of Section 28, T6N R9W to the confluence of Dry Cottonwood Creek with the Clark Fork River (SESWNE of Section 29, T6N R9W). In aggregate, the maximum combined volume that may be appropriated annually in Dry Cottonwood Creek with Claim 76G 30103774 during the term of this temporary change and in the Clark Fork River with Claims 76G 30103778 and 76G 30103784 while Temporary Change Authorization No. 76G 30069060 is active cannot exceed 1,060.6 AF.

This application will be subject to the following conditions:

MEASUREMENT CONDITION

DURING THE TERM OF THIS TEMPORARY CHANGE THE APPROPRIATOR WILL APPROPRIATE UP TO 4.28 CFS AND A MAXIMUM VOLUME OF 198.3 AF INSTREAM WITH STATEMENT OF CLAIM 76G 30103774. STREAMFLOWS WILL BE MEASURED BIWEEKLY

BY THE APPROPRIATOR WITH A DEPARTMENT-APPROVED METHOD BEGINNING MAY 6. AS THE NEED TO MAKE CALL APPROACHES THE APPROPRIATOR SHALL MEASURE STREAMFLOWS ON A MINIMUM WEEKLY BASIS. THE APPROPRIATOR SHALL KEEP A WRITTEN RECORD OF THE FLOW RATE AND VOLUME OF ALL WATER APPROPRIATED INSTREAM. RECORDS SHALL BE SUBMITTED BY NOVEMBER 30 OF EACH YEAR TO THE WATER RIGHTS BUREAU CENTRAL OFFICE UNTIL A PROJECT COMPLETION NOTICE IS RECEIVED BY THE DEPARTMENT, AND UPON REQUEST THEREAFTER. FAILURE TO SUBMIT REPORTS MAY BE CAUSE FOR REVOCATION OF THIS CHANGE. FAILURE TO SUBMIT MEASUREMENT REPORTS MAY RESULT IN REVOCATION OF THIS CHANGE.

IMPORTANT INFORMATION

IN AGGREGATE, THE MAXIMUM VOLUME OF WATER THAT WILL BE ANNUALLY APPROPRIATED IN DRY COTTONWOOD CREEK WITH STATEMENT OF CLAIM 76G 30103774 (198.3 AF) AND IN THE CLARK FORK RIVER WITH STATEMENT OF CLAIM NOS. 76G 30103778 AND 76G 30103784 (990 AF COMBINED) CANNOT EXCEED 1,060.6 AF WHILE TEMPORARY CHANGE AUTHORIZATION NOS. 76G 30145973 AND 76G 30069060 ARE BOTH ACTIVE.

NOTICE

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant with Modifications pursuant to § 85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives a valid objection, it will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection(s) and the valid objection(s) are conditionally withdrawn, the Department will consider the proposed condition(s) and grant the Application with such conditions as the Department decides necessary to satisfy the applicable criteria. E.g., §§ 85-2-310, -312, MCA.

Dated this 2nd day of March 2023.

/Original signed by Danika Holmes/
Danika Holmes, New Appropriations Program
Water Rights Bureau Central Office
Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT WITH MODIFICATIONS was served upon all parties listed below on this 2nd day of March 2023, by first class United States mail.

CLARK FORK COALITION
C/O ANDY FISCHER
P.O. BOX 7593
MISSOULA, MT 59807

_____

Maeve Holman, (406) 444-9556